

Response to Office Action Mailed July 31, 2002

A. Claims In The Case

Claims 16-24, 44-48 and 63-66 have been allowed. Claims 1-5, 8, 9, 25, 26, 29-37, 49, 50, 53-56, 59, 60, 67 and 68 have been rejected. Claims 6, 7, 10-15, 27, 28, 38-43, 51, 52, 57, 58, 61, 62, 69 and 70 have been objected to. Claims 71-150 have been added. Claims 1-150 are pending in the case.

B. Renumbering of Claims

Applicant acknowledges the Examiner's renumbering of the claims in response to the omission of claim number 47 in the application as originally filed. According, Applicant has numbered the added claims beginning at claim 71.

C. The Claims Are Not Obvious Over The Cited Art Pursuant To 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-5, 8, 9, 25, 26, 29-37, 49, 50, 53-56, 59, 60, 67 and 68 as being unpatentable over U.S. Patent 5,748,953 to Mizutani et al. (hereinafter "Mizutani") in view of U.S. Patent 5,550,734 to Tarter et al. (hereinafter "Tarter"). Applicant respectfully disagrees with these rejections for at least the reasons stated below.

In order to reject a claim as obvious, the Examiner has the burden of establishing a *prima facie* case of obviousness. *In re Warner et al.*, 379 F.2d 1011, 154 USPQ 173, 177-178 (CCPA 1967). To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974), MPEP § 2143.03.

Independent claims 1, 29 and 53 include combinations of features, including but not limited to the feature of determining “a word position of an occurrence of a term....” The combination of Mizutani and Tarter does not appear to teach or suggest such combination of features, including but not limited to the feature of determining the position of an occurrence of a term. Rather, Mizutani appears to be directed to several methods of constructing an occurrence bitmap to speed up a full text search. For example, the Examiner’s attention is directed to the Abstract of Mizutani which states in part, “A neighboring plural-character occurrence bitmap of a practical capacity capable of eliminating noises by hashing is realized, and a high speed full text search is realized equivalently....” (Mizutani, Abstract). The Examiner’s attention is further directed to Figures 8, 16, 23, 30 and 31 of Mizutani which show examples of occurrence bitmaps. In each of these figures, the occurrence bitmap appears to indicate the presence of a set of characters in a document without regard to the position of the set of characters within the document. Further, in each of these figures the occurrence bitmap appears to indicate the presence of a set of characters in a document without regard to whether the set of characters form a word.

Tarter appears to be directed to a system which may process insurance information and provide a help desk feature. For example, Tarter states, “One embodiment of CHARMS contains a help desk subsystem that provides means for the operation of a customer services help desk by the System Operator.” (Tarter, column 20, lines 15-17). However, Tarter does not appear to teach or suggest any method related to determination of relevance values in the help desk subsystem. Thus, the combination of Tarter and Mizutani, does not appear to teach or suggest the combinations of features in claims 1, 29, and 53, including but not limited to the feature of determining a word position of an occurrence of a term.

Similarly, independent claims 1, 29 and 53 include a combination of features, including

but not limited to the feature of determining “a total word count of a portion of the document.” The combination of Mizutani and Tarter does not appear to teach or suggest such combination of features, including but not limited to the feature of determining a total word count of a portion of a document. As previously stated Tarter does not appear to teach or suggest any method related to determination of relevance values. In the Office Action, the Examiner indicates that reference number 1020 of Fig.6 as well as Figs. 8 and 10 teach or suggest the feature of determining a total word count of a portion of the document. Reference number 1020 of Fig. 6 is a text box, which states:

Activate neighboring plural-character occurrence bitmap search program 211, extracts character strings at every second character positions, read bit lists for character strings from neighboring plural-character occurrence bitmap, and obtain logical product of bit lists (Mizutani, Fig. 6)

In Figs. 6, 8, 10 and elsewhere, Mizutani appears to teach a combination of features, including but not limited to the feature of forming sets of characters ranging in size from 2 to 4 characters by extracting each character or every second character position. However, Mizutani does not appear to teach or suggest combinations of features, including but not limited to determining a total word count for a portion of a document.

Independent claims 1, 29 and 53 further include combinations of features, including but not limited to the feature of determining “a relevance value for the occurrence of the term” by using the word position of the occurrence and the total word count of the portion of the document. The combination of Mizutani and Tarter does not appear to teach or suggest combinations features, including but not limited to determining a relevance value for an occurrence of a term by using the word position of the occurrence and the total word count of the portion of the document. As previously described, the combination of Mizutani and Tarter does not appear to teach or suggest such combinations of features including but not limited to determining a total word count of a portion of a document or determining a word position of an occurrence of a term. Thus, the combination of Mizutani and Tarter does not appear to teach or

suggest the combination of features in claims 1, 29, and 53, including but not limited to the feature of using the word position and word count to determine a relevance value.

Independent claims 25, 49 and 67 include combinations of features, including but not limited to the feature of determining “a relevance value for each of the one or more occurrences located in the one or more documents.” The combination of Mizutani and Tarter does not appear to teach or suggest combinations of features including but not limited to the feature of determining a relevance value for each of one or more occurrences located in one or more documents. As previously mentioned, Tarter does not appear to teach or suggest any method related to determination of relevance values in the help desk subsystem. Mizutani appears to teach combinations of features, including but not limited to determining whether a document includes a particular 2 to 4 character string anywhere in the document. However, Mizutani does not appear to teach or suggest the combinations of features in claims 25, 49 and 67, including but not limited to the feature of determining a relevance value associated with an individual occurrences of a term within one or more documents.

Independent claims 25, 49 and 67 further include combinations features, including but not limited to the feature of “the relevance values for the one or more occurrences” being used in “displaying the one or more occurrences of the one or more terms in order of relevance.” The combination of Mizutani and Tarter does not appear to teach or suggest the feature of using relevance values to display one or more occurrences of one or more terms in order of relevance. As previously mentioned, neither Tarter nor Mizutani appears to teach or suggest determining a relevance value for one or more occurrences of a term. Further, neither Tarter nor Mizutani appear to teach or suggest combinations of features, including but not limited to that occurrences of a term may be displayed in relevance order.

For at least the reasons stated above, Applicant respectfully submits that independent

claims 1, 25, 29, 49, 53 and 67, and claims dependent thereon, are patentable over Mizutani in view of Tarter.

D. Allowable Subject Matter

In the Office Action, the Examiner objected to claims 6, 7, 10-15, 27, 28, 38-43, 51, 52, 57, 58, 61, 62, 69 and 70 as being dependent upon rejected base claims. However, the Examiner states that the objected to claims would be allowable if rewritten in independent form. New independent claims 71, 77, 83, 89, 95, 103, 109, 115, 121, 126, 131, 138 and 144 combine certain features of independent claims 1, 25, 29, 49, 53, and 67, and, where appropriate, certain features from intervening claims with the allowable subject matter of claim 6, 7, 9, 27, 28, 38, 51, 52, 57, 58, 61 and 68. Thus, Applicant respectfully submits that new independent claims 71, 77, 83, 89, 95, 103, 109, 115, 121, 126, 131, 138 and 144 and claims dependent thereon are in condition for allowance.

E. Many Of The Dependent Claims Are Separately Patentable

The Examiner is also respectfully requested to separately consider each of the dependent claims for patentability. Many of the dependent claims in addition to those mentioned above are independently patentable.

For instance, claim 2 recites combinations of features including, but not limited to "dividing the word position by the total word count to produce the relevance value for the occurrence." With regard to this feature the Examiner has indicated that Figs. 10-12 of Mizutani teach or suggest this feature. Applicant respectfully disagrees. Fig. 11 of Mizutani appears to be "a diagram showing the structure of the neighboring plural-character occurrence bitmap creation and registration program" (Mizutani, column 8, lines 34-36). Fig. 11 does not appear to teach combinations of features, including but not limited to any method of determining a relevance

value. Fig. 12 of Mizutani appears to be “a diagram showing the structure of a neighboring plural-character occurrence bitmap search program” (Mizutani, column 8, lines 38 and 39). Fig. 12 does not appear to teach combinations of features, including but not limited to any method of determining a relevance value. Fig. 10 appears to teach determining whether a set of characters appear in one or more documents. Fig. 10 includes a logical product operation which Mizutani describes as an “AND” operation (Mizutani, column 7, line 67). However, neither Mizutani nor Tarter, alone or in combination, appears to teach or suggest such combinations of features, including but not limited to the feature of dividing a word position by a total word count to produce a relevance value for an occurrence.

Claim 3 includes the combinations of features, including but not limited to the feature of, “multiplying the relevance value by a first scaling factor to produce a scaled relevance value.” The Examiner has not shown that combinations of features, including but not limited to this feature is taught or suggested in the cited art.

Claim 25 includes such combinations of features, including but not limited to the features of, “determining a header relevance value” and “determining a text section relevance value.” The Examiner has not shown that combinations of features, including but not limited to this feature is taught or suggested in the cited art.

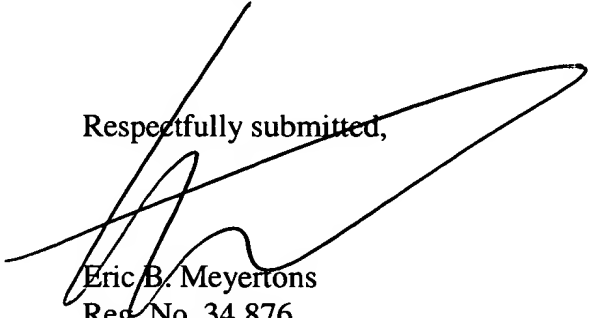
F. Summary

Based on the above, Applicant submits that all claims are in condition for allowance. Favorable reconsideration is respectfully requested.

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09/603,662

A fee authorization in the amount of \$2532.00 is enclosed for the added claims fee. If any extension of time is required, Applicant hereby requests the appropriate extension of time. If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley, Rose & Tayon, P.C. Deposit Account Number 50-1505/5053-27800/EBM

Respectfully submitted,



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